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ATTORNEY DOCKET NO. 10010038-1

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ZHW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Michael J. Brosnan

Serial No.: 09/811,001

Examiner: Henry N. Tran

Filing Date: March 16, 2001

Group Art Unit: 2674

Title: PORTABLE ELECTRONIC DEVICE WITH MOUSE-LIKE CAPABILITIES

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Sir:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on April 28, 2005

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) **\$500.00**.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)(1)-(5)) for the total number of months checked below:

<input type="checkbox"/>	one month	\$ 120.00
<input type="checkbox"/>	two months	\$ 450.00
<input type="checkbox"/>	three months	\$1020.00
<input type="checkbox"/>	four months	\$1590.00

☐ The extension fee has already been filled in this application.

☒ (b) Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account **50-1078** the sum of \$500.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **50-1078** pursuant to 37 CFR 1.25.

A duplicate copy of this transmittal letter is enclosed.

☒ I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit: June 28, 2005 OR

☐ I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Date of Facsimile:

Typed Name: Jeff A. Holmen

Signature: Jeff A. Holmen

Respectfully submitted,

Michael J. Brosnan

By Jeff A. Holmen

Jeff A. Holmen  
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Date: June 28, 2005


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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicant: Michael J. Brosnan  
Serial No.: 09/811,001  
Filed: March 16, 2005  
**Due Date: June 28, 2005**  
Title: PORTABLE ELECTRONIC DEVICE WITH MOUSE-LIKE CAPABILITIES

Examiner: Henry N. Tran  
Group Art Unit: 2674  
Docket No.: 10010038-1 (A310.104.101)



**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**Mail Stop Appeal Brief – Patents**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir/Madam:

This Appeal Brief is submitted in support of the Notice of Appeal filed on April 28, 2005, appealing the final rejection of claims 1-22 of the above-identified application as set forth in the Final Office Action mailed January 28, 2005.

The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 50-1078 in the amount of \$500.00 for filing a Brief in Support of an Appeal as set forth under 37 C.F.R. § 41.20(b)(2). At any time during the pendency of this application, please charge any required fees or credit any overpayment to Deposit Account No. 50-1078.

Appellant respectfully requests consideration and reversal of the Examiner's rejection of pending claims 1-22.

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**REAL PARTY IN INTEREST**

The intellectual property embodied in the pending application is assigned to Agilent Technologies, Inc.

**RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences known to Appellant that will have a bearing on the Board's decision in the present Appeal.

**STATUS OF CLAIMS**

In a Final Office Action mailed January 28, 2005, claims 1-22 were finally rejected. Claims 1-22 are pending in the application. Claims 1-22 are the subject of the present Appeal.

**STATUS OF AMENDMENTS**

A Response after Final under 37 C.F.R. § 1.116 was filed on March 28, 2005, but no amendments to the claims were proposed in the Response after Final.

**SUMMARY OF THE CLAIMED SUBJECT MATTER**

The Summary is set forth as an exemplary embodiment as the language corresponding to independent claims 1, 5, 11, 14, and 18.

The present invention, as claimed in independent claim 1, provides a method of controlling menu item selection in a portable electronic device, the portable electronic device including a menu display having a plurality of menu items and a menu item pointer movable by a user to highlight particular menu items. The method includes sensing two-dimensional relative movement between the portable electronic device and an imaging surface with a motion detection device. The method includes generating a first set of movement data with the motion detection device indicating an amount and direction of a first relative movement between the portable electronic device and the imaging surface. The method includes moving the menu item pointer based on the first set of movement data to highlight a first menu item. The method includes generating a second set of movement data with the motion detection device indicating an amount and direction of a second relative movement between

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the portable electronic device and the imaging surface. The method includes selecting the first menu item based on the second set of movement data. (See, e.g., specification at page 6, line 13 to page 9, line 13; Figures 1A, 1B, and 3; reference numbers 10, 10A, 10B, 14, 16, 18A-18C, 20, 109, 204, and 206).

The present invention, as claimed in independent claim 5, provides a portable electronic device. The portable electronic device includes a menu display having a plurality of menu items and a menu item pointer movable by a user to highlight particular menu items. The portable electronic device includes a motion detection device for sensing relative movement between the portable electronic device and an imaging surface, the motion detection device configured to generate a first set of movement data indicating an amount and direction of a first relative movement between the portable electronic device and the imaging surface, and configured to generate a second set of movement data indicating an amount and direction of a second relative movement between the portable electronic device and the imaging surface. The portable electronic device includes a controller configured to move the menu item pointer based on the first set of movement data to highlight a first menu item, the controller configured to select the first menu item based on the second set of movement data. (See, e.g., specification at page 6, line 13 to page 9, line 13; Figures 1A, 1B, and 3; reference numbers 10, 10A, 10B, 14, 16, 18A-18C, 20, 109, 204, and 206).

The present invention, as claimed in independent claim 11, provides a method of identifying the user of a portable electronic device. The method includes storing movement pattern data representing a first pattern of relative movement between the portable electronic device and an imaging surface. The method includes sensing relative movement between the portable electronic device and an imaging surface. The method includes generating a first set of motion data based on the sensed relative movement, the first set of motion data representing a second pattern of relative movement between the portable electronic device and an imaging surface. The method includes comparing the first set of motion data to the stored movement pattern data. The method includes identifying the user of the portable electronic device based on the comparison of the first set of motion data to the stored movement pattern data. (See, e.g., specification at page 9, lines 14-25, page 13, line 24 to page 15, line 19; Figures 1A, 1B, and 3; reference numbers 10, 10A, 10B, 20, 109, 204, and 206).

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The present invention, as claimed in independent claim 14, provides a portable electronic device. The portable electronic device includes a memory for storing movement pattern data representing a first pattern of relative movement between the portable electronic device and an imaging surface. The portable electronic device includes a motion detection device for generating a first set of motion data representing a second pattern of relative movement between the portable electronic device and an imaging surface. The portable electronic device includes a controller for comparing the first set of motion data to the stored movement pattern data. The controller is configured to identify the user of the portable electronic based on the comparison of the first set of motion data to the stored movement pattern data. (See, e.g., specification at page 9, lines 14-25, page 13, line 24 to page 15, line 19; Figures 1A, 1B, and 3; reference numbers 10, 10A, 10B, 20, 109, 204, and 206).

The present invention, as claimed in independent claim 18, provides a portable electronic device. The portable electronic device includes a memory for storing movement pattern data representing a first pattern of relative movement between the portable electronic device and an imaging surface. The portable electronic device includes a motion detection device for generating a first set of motion data representing a second pattern of relative movement between the portable electronic device and an imaging surface. The portable electronic device includes a controller for comparing the first set of motion data to the stored movement pattern data. The controller is configured to enable operation of the portable electronic device if the first set of motion data matches the stored movement pattern data. (See, e.g., specification at page 9, lines 14-25, page 13, line 24 to page 15, line 19; Figures 1A, 1B, and 3; reference numbers 10, 10A, 10B, 20, 109, 204, and 206).

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**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

- I. Claims 1, 2, 4-7, and 10 stand rejected under 35 U.S.C. §102(a) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being obvious over, Paloniemi, U.S. Patent Publication No. 2001/0017934 ("Paloniemi").
- II. Claims 11, 13-15, 18, 19, and 22 stand rejected under 35 U.S.C. §102(a) as being anticipated by Paloniemi.
- III. Claims 3, 8, 9, 12, 16, 17, 20, and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Paloniemi in view of Gordon et al., U.S. Patent No. 6,057,540 ("Gordon").

**ARGUMENT**

**The Applicable Law**

"A claim is anticipated if each and every element as set forth in the claim is found, either expressly or inherently described, in a single, prior art reference." *Verdegaal Bros. v. Union Oil Co., of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The Examiner has the burden under 35 U.S.C. §103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Three criteria must be satisfied to establish a *prima facie* case of obviousness. First, the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would teach, suggest, or motivate one to modify a reference or to combine the teachings of multiple references. *Id.* Second, the prior art can be modified or combined only so long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Third, the prior art reference or combined prior art references must teach or suggest all of the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). These three criteria are also set forth in §706.02(j) of the M.P.E.P.

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**I. Rejection of Claims 1, 2, 4-7, and 10 Under 35 U.S.C. §102(a) as Being Anticipated by, or in the Alternative Under 35 U.S.C. §103(a) as Being Unpatentable Over Paloniemi.**

The rejection of claims 1, 2, 4-7, and 10 under 35 U.S.C. §102(a) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being obvious over, Paloniemi, U.S. Patent Publication No. 2001/0017934 (“Paloniemi”), is not correct and should be withdrawn.

**A. Rejection of Claims 1, 4, 5, 7, and 10**

Independent claim 1 recites “generating a first set of movement data with the motion detection device indicating an amount and direction of a first relative movement between the portable electronic device and the imaging surface”, “moving the menu item pointer based on the first set of movement data to highlight a first menu item”, “generating a second set of movement data with the motion detection device indicating an amount and direction of a second relative movement between the portable electronic device and the imaging surface”, and “selecting the first menu item based on the second set of movement data.”

Independent claim 5 recites “the motion detection device configured to generate a first set of movement data indicating an amount and direction of a first relative movement between the portable electronic device and the imaging surface, and configured to generate a second set of movement data indicating an amount and direction of a second relative movement between the portable electronic device and the imaging surface” and “a controller configured to move the menu item pointer based on the first set of movement data to highlight a first menu item, the controller configured to select the first menu item based on the second set of movement data.”

The Examiner stated that:

Although Paloniemi, in Para. [0032], suggests the use of a finger tap motion for performing a menu item selection; Clearly, one skilled in the art could use any of the left and right motions instead of the tap motion for performing a menu item selection; because this would provide convenient data input, allow more flexibility in choosing movement data for input control, and enhance the usability of the portable electronic device. (Final Office Action at para. no. 3, page 3).

As indicated by the above quote, the Examiner appears to have acknowledged that Paloniemi does not teach or suggest selecting a highlighted menu item based on movement



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data as recited in claims 1 and 5. Since Paloniemi does not teach or suggest each and every limitation of independent claims 1 and 5, Paloniemi does not anticipate these claims. The Examiner's unsupported speculation regarding what one skilled in the art "could" do, does not establish a *prima facie* case of obviousness. One of the requirements of establishing a *prima facie* case of obviousness is that "the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP § 2143. Paloniemi discloses that selections are made with "a selection button or key", or by a "finger tap, to the fingerprint sensor". (Paloniemi at page 3, para. nos. 31 and 32). There is no teaching or suggestion in Paloniemi that any movement data is generated in response to pressing a selection button or key, or tapping the fingerprint sensor, let alone movement data that indicates "an **amount and direction** of a second relative movement between the portable electronic device and the imaging surface," as recited in claims 1 and 5. If no such movement data is generated, it logically follows that Paloniemi also does not teach or suggest selecting a highlighted menu item "based on" such movement data as recited in claims 1 and 5.

Since Paloniemi does not teach or suggest each and every limitation of claim 1 and claim 5, it is not clear if the Examiner is relying on Official Notice, or the concept of inherency, in the rejection of these claims. However, as indicated in the Manual of Patent Examining Procedure, "[o]fficial notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well known." MPEP § 2144.03(A). "It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well known." *Id.* (emphasis in original). The limitations in claims 1 and 5 that the Examiner appears to have acknowledged are not explicitly taught or suggested by Paloniemi are not well known facts that are capable of instant and unquestionable demonstration as being well known, and it would be inappropriate to simply rely on official notice in this case.

It is also not inherent in Paloniemi that a highlighted menu item is selected based on movement data as recited in claims 1 and 5. As the Federal Circuit has stated, "[i]nherent anticipation requires that the missing descriptive material is 'necessarily present,' not merely probably or possibly present, in the prior art." *Trintec Indus., v. Top-U.S.A. Corp.*, 63

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USPQ2d 1597, 1599 (Fed. Cir. 2002) (quoting *In re Robertson*, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)). Since the selection of a menu item in Paloniemi can be made without generating movement as recited in claims 1 and 5, it is not inherent in Paloniemi that a highlighted menu item is selected based on movement data.

In the Advisory Action mailed April 13, 2005, the Examiner added a citation to paragraph no. 0030 of Paloniemi to support the current rejection. Paragraph no. 0030 of Paloniemi includes a description of Figure 3C, which shows two options 29 being displayed on display 8. One option 29 is on the left side of display 8, and the other option 29 is on the right side of display 8. Paloniemi at paragraph no. 0030 discloses that “leftward motion across the fingerprint sensor may cause the left option to be selected and rightward motion across the fingerprint sensor may cause the right option to be selected.” Thus, this cited portion of Paloniemi indicates that an option is selected based on a single movement (leftward or rightward). In contrast, independent claims 1 and 5 each recite two separate and distinct movements. A menu item is highlighted based on the first movement, and the highlighted menu item is selected based on the second movement. Paloniemi does not teach or suggest the above-quoted limitations of claims 1 and 5.

In view of the above, Paloniemi does not teach or suggest each and every limitation of independent claims 1 and 5. Appellant submits that independent claims 1 and 5 are not anticipated or rendered obvious by Paloniemi, and respectfully requests that the rejection of independent claims 1 and 5 under 35 U.S.C. §102(a), or in the alternative, under 35 U.S.C. §103(a), be withdrawn. Since dependent claims 4, 7, and 10 further limit patentably distinct claim 1 or claim 5, claims 4, 7, and 10 are believed to be allowable over the cited reference, and Appellant respectfully requests that the rejection of claims 4, 7, and 10 be withdrawn.

**B. Rejection of Claims 2 and 6**

Claims 2 and 6 are dependent on independent claims 1 and 5, respectively. Since dependent claims 2 and 6 further limit patentably distinct claims 1 and 5, respectively, claims 2 and 6 are believed to be allowable over the cited reference. Claims 2 and 6 are also further distinguishable over the cited reference. Claims 2 and 6 each include the limitation “wherein the first set of movement data indicates movement in a first direction, and the second set of movement data indicates movement in a second direction, the second direction being

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substantially perpendicular to the first direction.” There is no teaching or suggestion in Paloniemi regarding highlighting a menu item based on a first movement in a first direction, and selecting the highlighted menu item based on a second movement in a second direction that is substantially perpendicular to the first direction. Appellant respectfully requests that the rejection of claims 2 and 6 be withdrawn.

**II. Rejection of Claims 11, 13-15, 18, 19, and 22 Under 35 U.S.C. §102(a) as Being Anticipated by Paloniemi.**

The rejection of claims 11, 13-15, 18, 19, and 22 under 35 U.S.C. §102(a) as being anticipated by Paloniemi is not correct and should be withdrawn.

**A. Rejection of Claims 11, and 13-15**

Independent claims 11 and 14 each include the limitations “storing movement pattern data representing a first pattern of relative movement between the portable electronic device and an imaging surface”, “generating a first set of motion data” the first set of motion data “representing a second pattern of relative movement between the portable electronic device and an imaging surface”, and “comparing the first set of motion data to the stored movement pattern data”. The Examiner stated that:

Paloniemi further also teach the use of a memory 9 for storing an image of the authorized user’s fingerprint, which is a pattern of ridges and valleys that lie across the surface of a user’s fingertip detected by the fingerprint sensor 5, and that is read on “a first pattern of relative movement between the portable electronic device and an image surface; see Para. [0022]; and a controller 3 for comparing the image of the user’s fingerprint generated when “the user swipes his fingertip over the fingerprint sensor 5” and the stored authorized user’s fingerprint (the authorized user’s fingerprint) for identifying the user of the portable electronic device; see Para. [0022] and [0032]. (Final Office Action at para. no. 6, pages 3-4).

Applicant respectfully disagrees with the Examiner’s conclusion that storing an image of a user’s fingerprint somehow teaches or suggests “storing **movement pattern** data representing a first **pattern of relative movement** between the portable electronic device and an imaging surface”. The “pattern of ridges and valleys”, as stated by the Examiner, of the fingerprint image, is not a movement pattern, nor does the fingerprint image represent a pattern of relative movement between a portable electronic device and an imaging surface.

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Applicant also respectfully disagrees with the Examiner's conclusion that comparing a fingerprint image with a stored authorized fingerprint image somehow teaches or suggests "comparing the first set of **motion** data to the stored **movement pattern** data". Neither fingerprint image is motion data, and neither fingerprint image is movement pattern data.

Paloniemi does not teach or suggest identifying a user based on a comparison of stored movement pattern data representing a first pattern of relative movement with a set of motion data representing a second pattern of relative movement. Rather, Paloniemi discloses that, in a "fingerprint input mode", an image of a user's fingerprint is formed, and this image is then compared to a stored fingerprint image. (See, e.g., Paloniemi at page 3, para. no. 32). If the images match, the device switches to a "motion input mode". (See, e.g., Paloniemi at page 3, para. no. 32). The disclosure in Paloniemi that two fingerprint images are compared to determine if they match does not teach or suggest identifying a user based on a comparison of stored movement pattern data representing a first pattern of relative movement with a set of motion data representing a second pattern of relative movement. The Examiner has cited nothing in Paloniemi that indicates that motion data is even generated during the fingerprint input mode disclosed in Paloniemi.

In the Response to Arguments section of the Final Office Action, the Examiner stated that:

Applicant's arguments with respect to the rejections of claims 1-22 have been fully considered by they are not persuasive because of the following reasons . . . (ii) "a first pattern" is met by "a pattern of ridges and valleys that lie across the surface of the user's fingertip" detected by the fingerprint sensor 5 when a user swipes his fingertip over the fingerprint sensor 5; (iii) Paloniemi does teach identifying a user. (Final Office Action at para. no. 12, pages 5-6).

The Examiner's statement that "'a first pattern' is met by 'a pattern of ridges and valleys that lie across the surface of the user's fingertip'" ignores claim terms used in independent claims 11 and 14. These claims do not simply recite "a first pattern". Rather, each of these claims recites "storing **movement pattern** data representing a **first pattern of relative movement** between the portable electronic device and an imaging surface". The Examiner is ignoring words used in claims 11 and 14, which is improper under established precedent. "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The pattern of ridges and valleys of the fingerprint image in Paloniemi is not a "movement

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pattern,” nor does the fingerprint image represent a “pattern of relative movement” between a portable electronic device and an imaging surface.

Lastly, the Examiner’s statement that “Paloniemi does teach identifying a user” also ignores claim terms. None of the claims simply recite “identifying a user”. Rather, claims 11 and 14 recite identifying a user **“based on the comparison of the first set of motion data to the stored movement pattern data.”** Paloniemi does not teach or suggest identifying a user, or enabling operation of a portable electronic device, **based on a comparison of stored movement pattern data representing a first pattern of relative movement with a set of motion data representing a second pattern of relative movement.**

In view of the above, Paloniemi does not teach or suggest each and every limitation of independent claims 11 and 14. Appellant submits that independent claims 11 and 14 are not anticipated by Paloniemi, and respectfully requests that the rejection of independent claims 11 and 14 under 35 U.S.C. §102(a) be withdrawn. Since dependent claims 13 and 15 further limit patentably distinct claims 11 and 14, respectively, claims 13 and 15 are believed to be allowable over the cited reference, and Appellant respectfully requests that the rejection of claims 13 and 15 under 35 U.S.C. §102(a) be withdrawn.

**B. Rejection of Claims 18, 19, and 22**

Independent claim 18 includes the limitations “storing movement pattern data representing a first pattern of relative movement between the portable electronic device and an imaging surface”, “generating a first set of motion data” the first set of motion data “representing a second pattern of relative movement between the portable electronic device and an imaging surface”, and “comparing the first set of motion data to the stored movement pattern data”. For the reasons described above with respect to independent claims 11 and 14, Paloniemi does not teach or suggest these limitations of claim 18.

Paloniemi also does not teach or suggest enabling operation of a portable electronic device based on a comparison of stored movement pattern data representing a first pattern of relative movement with a set of motion data representing a second pattern of relative movement, as recited in independent claim 18. Rather, Paloniemi discloses that, in a “fingerprint input mode”, an image of a user’s fingerprint is formed, and this image is then compared to a stored fingerprint image. (See, e.g., Paloniemi at page 3, para. no. 32). If the

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images match, the device switches to a “motion input mode”. (See, e.g., Paloniemi at page 3, para. no. 32). The disclosure in Paloniemi that two fingerprint images are compared to determine if they match does not teach or suggest enabling operation of a portable electronic device based on a comparison of stored movement pattern data representing a first pattern of relative movement with a set of motion data representing a second pattern of relative movement. The Examiner has cited nothing in Paloniemi that indicates that motion data is even generated during the fingerprint input mode disclosed in Paloniemi.

In view of the above, Paloniemi does not teach or suggest each and every limitation of independent claim 18. Appellant submits that independent claim 18 is not anticipated by Paloniemi, and respectfully requests that the rejection of independent claim 18 under 35 U.S.C. §102(a) be withdrawn. Since dependent claims 19 and 22 further limit patentably distinct claim 18, claims 19 and 22 are believed to be allowable over the cited reference, and Appellant respectfully requests that the rejection of claims 19 and 22 under 35 U.S.C. §102(a) be withdrawn.

**III. Rejection of Claims 3, 8, 9, 12, 16, 17, 20, and 21 Under 35 U.S.C. §103(a) as Being Unpatentable Over Paloniemi in View of Gordon.**

The Examiner rejected claims 3, 8, 9, 12, 16, 17, 20, and 21 under 35 U.S.C. §103(a) as being unpatentable over Paloniemi in view of Gordon et al., U.S. Patent No. 6,057,540 (“Gordon”). Appellant submits that the Examiner has not established a *prima facie* case of obviousness of claims 3, 8, 9, 12, 16, 17, 20, and 21.

**A. Rejection of Claims 3 and 8**

Claims 3 and 8 are dependent on independent claims 1 and 5, respectively. As described above with reference to these independent claims, Paloniemi does not teach or suggest the above-quoted limitations of these claims. Gordon also does not teach or suggest the above-quoted limitations of these claims. The Examiner has also failed to identify any suggestion in the cited references to combine them in a manner that would produce the claimed invention.

In view of the above, dependent claims 3 and 8, which further limit patentably distinct claims 1 and 5, respectively, are believed to be allowable over the cited references, either

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alone, or in combination. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of claims 3 and 8, and the rejection of claims 3 and 8 under 35 U.S.C. §103(a) should be withdrawn.

**B. Rejection of Claim 9**

Claim 9 is dependent on independent claim 5. As described above with reference to claim 5, Paloniemi does not teach or suggest the above-quoted limitations of claim 5. Gordon also does not teach or suggest the above-quoted limitations of claim 5. The Examiner has also failed to identify any suggestion in the cited references to combine them in a manner that would produce the claimed invention.

In view of the above, dependent claim 9, which further limits patentably distinct claim 5, is believed to be allowable over the cited references, either alone, or in combination. Claim 9 is also further distinguishable over the cited references. The Examiner has not identified any disclosure in Paloniemi or Gordon that teaches or suggests the limitation “wherein the motion detection device is positioned on a back side of the portable electronic device, and the menu display is positioned on a front side of the portable electronic device”, as recited in claim 9. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of claim 9, and the rejection of claim 9 under 35 U.S.C. §103(a) should be withdrawn.

**C. Rejection of Claims 12 and 16**

Claims 12 and 16 are dependent on independent claims 11 and 14, respectively. As described above with reference to these independent claims, Paloniemi does not teach or suggest the above-quoted limitations of these claims. Gordon also does not teach or suggest the above-quoted limitations of these claims. The Examiner has also failed to identify any suggestion in the cited references to combine them in a manner that would produce the claimed invention.

In view of the above, dependent claims 12 and 16, which further limit patentably distinct claims 11 and 14, respectively, are believed to be allowable over the cited references, either alone, or in combination. Appellant respectfully submits that the Examiner has not

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established a *prima facie* case of obviousness of claims 12 and 16, and the rejection of claims 12 and 16 under 35 U.S.C. §103(a) should be withdrawn.

**D. Rejection of Claim 17**

Claim 17 is dependent on independent claim 14. As described above with reference to claim 14, Paloniemi does not teach or suggest the above-quoted limitations of claim 14. Gordon also does not teach or suggest the above-quoted limitations of claim 14. The Examiner has also failed to identify any suggestion in the cited references to combine them in a manner that would produce the claimed invention.

In view of the above, dependent claim 17, which further limits patentably distinct claim 14, is believed to be allowable over the cited references, either alone, or in combination. Claim 17 is also further distinguishable over the cited references. The Examiner has not identified any disclosure in Paloniemi or Gordon that teaches or suggests the limitation “wherein the motion detection device is positioned on a back side of the portable electronic device”, as recited in claim 17. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of claim 17, and the rejection of claim 17 under 35 U.S.C. §103(a) should be withdrawn.

**E. Rejection of Claim 20**

Claim 20 is dependent on independent claim 18. As described above with reference to claim 18, Paloniemi does not teach or suggest the above-quoted limitations of claim 18. Gordon also does not teach or suggest the above-quoted limitations of claim 18. The Examiner has also failed to identify any suggestion in the cited references to combine them in a manner that would produce the claimed invention.

In view of the above, dependent claim 20, which further limits patentably distinct claim 18, is believed to be allowable over the cited references, either alone, or in combination. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of claim 20, and the rejection of claim 20 under 35 U.S.C. §103(a) should be withdrawn.



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**F. Rejection of Claim 21**

Claim 21 is dependent on independent claim 18. As described above with reference to claim 18, Paloniemi does not teach or suggest the above-quoted limitations of claim 18. Gordon also does not teach or suggest the above-quoted limitations of claim 18. The Examiner has also failed to identify any suggestion in the cited references to combine them in a manner that would produce the claimed invention.

In view of the above, dependent claim 21, which further limits patentably distinct claim 18, is believed to be allowable over the cited references, either alone, or in combination. Claim 21 is also further distinguishable over the cited references. The Examiner has not identified any disclosure in Paloniemi or Gordon that teaches or suggests the limitation “wherein the motion detection device is positioned on a back side of the portable electronic device”, as recited in claim 21. Appellant respectfully submits that the Examiner has not established a *prima facie* case of obviousness of claim 21, and the rejection of claim 21 under 35 U.S.C. §103(a) should be withdrawn.

**Conclusion**

For the above reasons, Appellant respectfully submits that the cited art neither anticipates nor renders the claimed invention obvious, and therefore the claimed invention does patentably distinguish over the cited art. Therefore, Appellant respectfully submits that the rejections to pending claims 1-22 are in error, and Appellant respectfully requests that the Board reverse the Examiner and find all pending claims allowable.

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**CLAIMS APPENDIX**

1.(Previously Presented) A method of controlling menu item selection in a portable electronic device, the portable electronic device including a menu display having a plurality of menu items and a menu item pointer movable by a user to highlight particular menu items, the method comprising:

sensing two-dimensional relative movement between the portable electronic device and an imaging surface with a motion detection device;

generating a first set of movement data with the motion detection device indicating an amount and direction of a first relative movement between the portable electronic device and the imaging surface;

moving the menu item pointer based on the first set of movement data to highlight a first menu item;

generating a second set of movement data with the motion detection device indicating an amount and direction of a second relative movement between the portable electronic device and the imaging surface; and

selecting the first menu item based on the second set of movement data.

2.(Original) The method of claim 1, wherein the first set of movement data indicates movement in a first direction, and the second set of movement data indicates movement in a second direction, the second direction being substantially perpendicular to the first direction.

3.(Original) The method of claim 1, and further comprising:

directing light onto the imaging surface, thereby generating reflected images;

focusing the reflected images onto an array of photo detectors;

generating digital representations of the reflected images based on outputs of the photo detectors; and

correlating at least one version of a first one of the digital representations with at least one version of a second one of the digital representations.

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4.(Original) The method of claim 1, wherein the portable electronic device is one of a cellular telephone, personal digital assistant, digital camera, pager, portable music player, and portable game device.

5.(Previously Presented) A portable electronic device comprising:

- a menu display having a plurality of menu items and a menu item pointer movable by a user to highlight particular menu items;
- a motion detection device for sensing relative movement between the portable electronic device and an imaging surface, the motion detection device configured to generate a first set of movement data indicating an amount and direction of a first relative movement between the portable electronic device and the imaging surface, and configured to generate a second set of movement data indicating an amount and direction of a second relative movement between the portable electronic device and the imaging surface; and
- a controller configured to move the menu item pointer based on the first set of movement data to highlight a first menu item, the controller configured to select the first menu item based on the second set of movement data.

6.(Original) The device of claim 5, wherein the first set of movement data indicates movement in a first direction, and the second set of movement data indicates movement in a second direction, the second direction being substantially perpendicular to the first direction.

7.(Previously Presented) The device of claim 5, wherein the motion detection device is an optical motion detection device.

8.(Previously Presented) The device of claim 7, wherein the optical motion detection device further comprises:

- a light source for illuminating the imaging surface, thereby generating reflected images;
- an array of photo detectors;
- a lens for focusing the reflected images onto the array of photo detectors; and

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wherein the optical motion detection device is configured to generate digital representations of the reflected images based on outputs of the photo detectors and correlate at least one version of a first one of the digital representations with at least one version of a second one of the digital representations.

9.(Previously Presented) The device of claim 5, wherein the motion detection device is positioned on a back side of the portable electronic device, and the menu display is positioned on a front side of the portable electronic device.

10.(Original) The device of claim 5, wherein the portable electronic device is one of a cellular telephone, personal digital assistant, digital camera, pager, portable music player, and portable game device.

11.(Original) A method of identifying the user of a portable electronic device, the method comprising:

storing movement pattern data representing a first pattern of relative movement between the portable electronic device and an imaging surface;  
sensing relative movement between the portable electronic device and an imaging surface;  
generating a first set of motion data based on the sensed relative movement, the first set of motion data representing a second pattern of relative movement between the portable electronic device and an imaging surface;  
comparing the first set of motion data to the stored movement pattern data; and  
identifying the user of the portable electronic device based on the comparison of the first set of motion data to the stored movement pattern data.

12.(Original) The method of claim 11, and further comprising:

directing light onto the imaging surface, thereby generating reflected images;  
focusing the reflected images onto an array of photo detectors;  
generating digital representations of the reflected images based on outputs of the photo detectors; and

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correlating at least one version of a first one of the digital representations with at least one version of a second one of the digital representations.

13.(Previously Presented) The method of claim 11, and further comprising:  
enabling operation of the portable electronic device if the first set of motion data matches the stored movement pattern data.

14.(Previously Presented) A portable electronic device comprising:  
a memory for storing movement pattern data representing a first pattern of relative movement between the portable electronic device and an imaging surface;  
a motion detection device for generating a first set of motion data representing a second pattern of relative movement between the portable electronic device and an imaging surface; and  
a controller for comparing the first set of motion data to the stored movement pattern data, the controller configured to identify the user of the portable electronic based on the comparison of the first set of motion data to the stored movement pattern data.

15.(Previously Presented) The device of claim 14, wherein the motion detection device is an optical motion detection device.

16.(Previously Presented) The device of claim 15, wherein the optical motion detection device further comprises:

a light source for illuminating the imaging surface, thereby generating reflected images;  
an array of photo detectors;  
a lens for focusing the reflected images onto the array of photo detectors; and  
wherein the optical motion detection device is configured to generate digital representations of the reflected images based on outputs of the photo detectors and correlate at least one version of a first one of the digital representations with at least one version of a second one of the digital representations.

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17.(Previously Presented) The device of claim 14, wherein the motion detection device is positioned on a back side of the portable electronic device.

18.(Previously Presented) A portable electronic device comprising:

- a memory for storing movement pattern data representing a first pattern of relative movement between the portable electronic device and an imaging surface;
- a motion detection device for generating a first set of motion data representing a second pattern of relative movement between the portable electronic device and an imaging surface; and
- a controller for comparing the first set of motion data to the stored movement pattern data, the controller configured to enable operation of the portable electronic device if the first set of motion data matches the stored movement pattern data.

19.(Previously Presented) The device of claim 18, wherein the motion detection device is an optical motion detection device.

20.(Previously Presented) The device of claim 19, wherein the motion detection device further comprises:

- a light source for illuminating the imaging surface, thereby generating reflected images;
- an array of photo detectors;
- a lens for focusing the reflected images onto the array of photo detectors; and
- wherein the motion detection device is configured to generate digital representations of the reflected images based on outputs of the photo detectors and correlate at least one version of a first one of the digital representations with at least one version of a second one of the digital representations.

21.(Previously Presented) The device of claim 18, wherein the motion detection device is positioned on a back side of the portable electronic device.

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22.(Original) The device of claim 18, wherein the portable electronic device is one of a cellular telephone, personal digital assistant, digital camera, pager, portable music player, and portable game device.

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**EVIDENCE APPENDIX**

None.



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**RELATED PROCEEDINGS APPENDIX**

None.

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Any inquiry regarding this Amendment and Response should be directed to Jeff A. Holmen at the below-listed telephone number or Pamela Lau Kee at Telephone No. (408) 553-3059, Facsimile No. (408) 553-3063. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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6/28/05

Jeff A. Holmen

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CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Mail Stop Appeal Brief – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 28<sup>th</sup> day of June, 2005.

By \_\_\_\_\_

Name: Jeff A. Holmen